

ball fatigue life. For ceramic components, the critical BGA connections 30 are located at the far corners, or the far DNP (distance to neutral point), and may be staggered at that location. Alternatively, for organic components, the critical BGA connections 30 are located under the die region of the laminate 28, and may be staggered at that location. The BGA connections 30 are offset by approximately the thickness of the laminate 28. This provides the laminate 28 with additional flexibility in the Z direction, as illustrated in Figs. 3A and 3B. In particular, Fig. 3A shows the module 20 during bending, wherein the chip package 22 and the card 24 deform in the Z direction, thereby applying stresses to the interconnection 26, as illustrated. However, due to the flexible nature of the laminate 28, the interconnection 26 can rotate, flex, or bend upwards and downwards as needed, in response to stresses in the X, Y and Z directions created by the CTE mismatch between the chip package 22 and the circuit card 24, without transmitting the stresses into the critical BGA connections 30, as further illustrated in Fig. 3B.

IN THE CLAIMS:

1. (Twice Amended) An electronic device, comprising:

a first substrate;

a second substrate; and

a flexible connector attached between the first and second substrates by a plurality of contacts on a first and a second surface of the connector, wherein all of the contacts on the first and second surfaces alternate with respect to each other.

3. The electronic device of claim 1, wherein the connector comprises a laminate material.